

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

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JUN. 23. 2004

MAEDA PATENT OFFICE

Applicant's or agent's file reference M04-TJ003CT1	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2004/003808	International filing date (day/month/year) 19/03/2004	(Earliest) Priority Date (day/month/year) 20/03/2003
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO. LTD		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

FINFET-TYPE SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 11

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 20/04003808

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L21/336 H01L29/423 H01L29/786 H01L21/84 H01L27/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 996 574 A (SHIRASAKI MASAHIRO) 26 February 1991 (1991-02-26) column 7, line 34 -column 8, line 15; claims 11-13; figures 10,11 ---	1-11
X	EP 0 623 963 A (SIEMENS AG) 9 November 1994 (1994-11-09) the whole document ---	1-11
X	US 2002/003256 A1 (MAEGAWA SHIGETO) 10 January 2002 (2002-01-10) page 6, paragraph 89 - paragraph 94 page 7, paragraph 100 -page 9, paragraph 123; claims; figures 1-23 --- -/--	1-11

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

14 June 2004

Date of mailing of the international search report

22/06/2004

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 20/0400380

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 288 431 B1 (IWASA SHOICHI ET AL) 11 September 2001 (2001-09-11) column 1, line 66 -column 2, line 34 column 3, line 35 -column 4, line 26 column 11, line 40 -column 13, line 58 column 18, line 42 -column 20, line 46; claims; figures 1-6 ---	1-11
X	US 6 413 802 B1 (SUBRAMANIAN VIVEK ET AL) 2 July 2002 (2002-07-02) the whole document ---	1-11
A	KEDZIERSKI J ET AL: "High-performance symmetric-gate and CMOS-compatible Vt asymmetric-gate FinFET devices" INTERNATIONAL ELECTRON DEVICES MEETING 2001. IEDM. TECHNICAL DIGEST. WASHINGTON, DC, DEC. 2 - 5, 2001, NEW YORK, NY: IEEE, US, 2 December 2001 (2001-12-02), pages 1951-1954, XP010575161 ISBN: 0-7803-7050-3 cited in the application the whole document -----	1-11

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 20/04003808

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4996574	A	26-02-1991	JP	2014578 A	18-01-1990
EP 0623963	A	09-11-1994	EP	0623963 A1	09-11-1994
			JP	7050421 A	21-02-1995
US 2002003256	A1	10-01-2002	JP	2002151688 A	24-05-2002
			DE	10141916 A1	28-03-2002
			TW	497272 B	01-08-2002
			US	2003141546 A1	31-07-2003
US 6288431	B1	11-09-2001	JP	11068069 A	09-03-1999
			US	2002125536 A1	12-09-2002
US 6413802	B1	02-07-2002	NONE		